



# STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION



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June 26, 2015

Subject: Project No. 73-182

F.A.P. No. 0008(127)

Rehabilitation of Bridge No. 00608 on Route 8 NB over the Naugatuck River and Naugatuck Railroad.

## NOTICE TO CONTRACTORS:

This is to notify all concerned and especially the prospective bidders that the bid opening for the subject project is still scheduled for July 1, 2015 at 2:00 P.M. in the Conference Room of the Department of Transportation Administration Building, 2800 Berlin Turnpike, Newington, Connecticut.

Addendum No. 2 is attached and can also be obtained on the Statewide Contracting Portal at [http://www.biznet.ct.gov/scp\\_search/BidResults.aspx?groupid=64](http://www.biznet.ct.gov/scp_search/BidResults.aspx?groupid=64)

This addendum is necessary to revise a specification and revise a plan sheet.

**Pre-Bid Questions and Answers:** Questions pertaining to DOT advertised construction projects must be presented through the CTDOT Pre-Bid Q and A Website. The Department cannot guarantee that all questions will be answered prior to the bid date. **PLEASE NOTE - at 12:01 am, the day before the bid, the subject project(s) being bid will be removed from the Q and A Website, Projects Advertised Section, at which time questions can no longer be submitted through the Q and A Website. At this time, the Q and A for those projects will be considered final, unless otherwise stated and/or the bid is postponed to a future date and time to allow for further questions and answers to be posted.**

*H. J. Emond*

For: Gregory D. Straka  
Contracts Manager  
Division of Contracts Administration

**JUNE 26, 2015**  
**REHABILITATION OF BRIDGE NO. 00608 ON ROUTE 8 NORTHBOUND OVER**  
**NAUGATUCK RIVER & NAUGATUCK RAILROAD**  
**FEDERAL AID PROJECT NO. 0008(127)**  
**STATE PROJECT NO. 73-182**

**TOWNS OF LITCHFIELD AND HARWINTON**

**ADDENDUM NO. 2**

This Addendum addresses the following questions and answers contained on the “CT DOT QUESTIONS AND ANSWERS WEBSITE FOR ADVERTISED CONSTRUCTION PROJECTS”:

Question and Answer Nos. 20, 21, 22, and 23.

**SPECIAL PROVISION**

**REVISED SPECIAL PROVISION**

The following Special Provision is hereby deleted in its entirety and replaced with the attached like-named Special Provision:

- **ITEM NO. 0601202A – CONCRETE FOR LINK-SLAB**

**PLAN**

**REVISED PLAN**

The following Plan Sheet is hereby deleted and replaced with the like-numbered Plan Sheet:  
04.02.A2

The Bid Proposal Form and Detailed Estimate Sheet are not affected by this change.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

## **ITEM #0601202A –CONCRETE FOR LINK-SLAB**

Work under this item shall conform to the pertinent requirements of Section 6.01 supplemented and amended as follows:

**Description:** *Add the following:*

Where indicated in the plans, the Contractor shall submit for review and acceptance a concrete mix design to be used at the locations indicated on the contract drawings in accordance with the contract specifications. This mix design shall produce a concrete that is high performance fiber reinforced concrete that is workable at the placement and offers resistance to shrinkage cracking.

The mix design is to be submitted 15 days prior to the first trial batch.

The concrete shall be composed of Portland cement (Type 1), fine and coarse aggregates, poly-vinyl-alcohol fibers, and water, high range water reducer (HRWR), Ground Granulated Blast Furnace Slag (GGBFS) up to 30% of the Portland cement, micro silica up to 10% by weight of cement, and retarder admixtures are optional.

The Contractor shall work closely with the Concrete for Link-Slab manufacturer and their technical representative to ensure design criteria are met.

**Materials:** *Add the following:*

Materials for Concrete for Link-Slab shall conform to the requirements of Article M.03.01 amended as follows:

**Coarse Aggregate:** The mix shall be designed utilizing a nominal maximum size of No. 6 aggregate and shall also contain poly-vinyl-alcohol fibers.

**Admixtures:**

Microsilica may be allowed up to 10% by weight of cement

Fibers to be used shall be manufactured of poly-vinyl-alcohol (PVA) with a fiber diameter of 1.5 mils and a length between 0.3 inch and 0.5 inch. The surface of the fiber shall be oiled by the manufacturer with 1.2% (by weight) hydrophobic oiling compound along the length of the fiber. Fiber strength shall be a minimum of 232 ksi with a tensile elastic modulus of at least 5,800 ksi.

**Water Reducing, High Range Admixture:** Water reducing, high range admixture (superplasticizer) complying with ASTM C 494, Type F or G, ASTM C 1017, Type 1 or 2. In addition, the selected water reducing-high range admixtures should be comprised of a polycarboxylate chemical composition.

Retarding admixture shall comply with ASTM C 494, Type D and M.03.01.09

Neoprene Pads: Shall conform to M.03 of the Standard Specifications, or approved equal.

Table

<b>Minimum Strength of Concrete for Link-Slab Material</b>	<b>7 day</b>	<b>14 day</b>	<b>28 day</b>
Compressive	3200 psi	4000 psi	4500 psi
Flexural Performance Test (ASTM C1609)	500 psi	500 psi	500 psi

Trial Batch: The Contractor shall appoint a technical representative capable of making adjustments to the batching and mixing of Concrete for Link-Slab material. This representative must be familiar with the mixing, batching and placement of Concrete for Link-Slab material. The technical representative will designate a batching sequence of Concrete for Link-Slab material to ensure uniform fiber dispersion, and homogeneity of the material. The batching sequence must be reviewed and accepted by the Engineer. The technical representative shall be present at the trial batch and at the first placement of Concrete for Link-Slab material to make recommendations and adjustments.

A 4 c.y. trial batch shall be mixed and placed at the mix plant or as designated by the Engineer a minimum of 28 working days prior to full production. The Engineer must be notified of the time of the trial batch mix a minimum of 48 hours prior to batching. Quality assurance specimens shall be cast from this trial batch according to Article 6.01.03 of the Standard Specifications, and a Certified Test Report, prepared by an independent Laboratory, shall be furnished by the Contractor to validate the early age hardened properties of the Concrete for Link-Slab mixture.

The trial batch shall be prepared following the adjusted mix design and with the same materials that will be used in the Concrete for Link-Slab mixture. For the trial batch to be considered successful, the concrete must be produced consistently, present a workable product, provide even fiber dispersion through a mixture rheology, upon similar placement conditions that is anticipated for the structure. The 7 and 14 day compressive and tensile strengths, and uniaxial tensile strain capacity must meet the requirements of this special provision as demonstrated by the Certified Test Report furnished by the Contractor.

Other concrete mixes that meet or exceed the minimum requirements specified in the Table shall also be acceptable for use under this item.

If a trial batch does not meet these requirements additional trial batches shall be repeated at no additional cost to the Department.

#### **Construction Methods:**

ITEM #0601202A

Construction Methods for this work shall conform to the requirements of Article 6.01.03, amended as follows:

The Contractor shall install temporary bulkheads in the bridge deck slab, where indicated on the plans, to define the limits of the Concrete for Link-Slab. The bulkheads shall be removed after curing of the Concrete.

Prior to placement of the Concrete for Link-Slab all interfaces shall be wetted with a uniform spray application of water so that the surfaces are moist at the time of placement, with no standing water. Water collecting in depressed areas of the forms shall be blown out with clean, oil free, compressed air.

Sidewalk, curb or barriers shall not be cast on the bridge deck until the Concrete for Link-Slab has received a minimum of two (2) days continuous wet cure cycles. Heavy equipment is not allowed on the bridge deck until it has attained the 28 day strength listed in Table 2. Sidewalks, curbs and parapets within the link-slab span shall be cast of Concrete for Link-Slab material.

Neoprene Pads: Shall be placed on top of girder flanges, in accordance with the plans.

**Method of Measurement:** *Add the following:*

Concrete for Link-Slab shall be measured for payment by the actual volume in cubic yards of Concrete for Link-Slab, complete and accepted, within the limits shown on the plans or as ordered by the Engineer.

**Basis of Payment:** *Add the following:*

Concrete for Link-Slab: This material will be paid for at the contract unit price per cubic yard for Concrete for Link-Slab, complete in place, which price shall include the furnishing, installing and removing all temporary bulkheads, all materials, equipment, tools, labor and work incidental thereto, including, test batches, including placement equipment, heating, and all costs associated with the technical representative.

**Pay Item**

Concrete for Link-Slab

**Pay Unit**

c.y.